

5

10

15

20

25

30

in response to a determination that that the first distributed monitor controller is active, requesting the shutdown of the second distributed monitor controller.

10. A method for management of a distributed data processing system using a network management framework comprised of network management framework components, the method comprising:

```

5         receiving a resource request from a first network
management framework component;

```

in response to receiving the resource request from the first network management framework component, determining whether the first network management framework component is
10 a duplicate of a second network management framework component; and

in response to a determination that the first network management framework component is not a duplicate of a second network management framework component, granting access for a resource identified by the resource request to the first network management framework component.

11. The method of claim 10 further comprising:

detecting a potential failure of the second network
20 management framework component; and

in response to detecting the potential failure of the second network management framework component, activating the first network management framework component, wherein the first network management framework component is similarly configured to the second network management framework component.

12. The method of claim 10 further comprising:

in response to a determination that the first network management framework component is a duplicate of a second network management framework component, denying access for a resource identified by the resource request to the first network management framework component.

13. The method of claim 10 further comprising:

in response to a determination that the first network management framework component is a duplicate of a second network management framework component, determining whether the second network management framework component is active; and

in response to a determination that that the second network management framework component is active, terminating the first network management framework component.

14. An apparatus for management of a distributed data processing system, the apparatus comprising:

means for monitoring resources within the distributed data processing system using a set of distributed monitor controllers, wherein a first distributed monitor controller is responsible for monitoring a set of resources;

means for generating topology information associated with the set of resources in response to monitoring the set of resources;

means for detecting a failure of the first distributed monitor controller; and

means for updating the topology information associated with the set of resources in response to detecting the failure of the first distributed monitor controller.

15. The apparatus of claim 14 further comprising:

means for detecting a communication failure with the first distributed monitor controller; and

means for starting a second distributed monitor controller, wherein the first distributed monitor controller and the second distributed monitor controller are similarly configured.

16. The apparatus of claim 15 further comprising:

means for requesting the shutdown of the second distributed monitor controller in response to a determination that the first distributed monitor controller is active.

17. The apparatus of claim 16 further comprising:

means for receiving a request from the second distributed monitor controller to establish an input/output connection; and

means for determining that the first distributed monitor controller has an active input/output connection.

18. The apparatus of claim 15 further comprising:

5 means for establishing an input/output connection for the second distributed monitor controller in response to a determination that that the first distributed monitor controller is inactive.

10 19. The apparatus of claim 18 further comprising:

means for receiving a request from the second distributed monitor controller to establish an input/output connection;

15 means for determining that the first distributed monitor controller does not respond to communication on its input/output connection; and

means for terminating the input/output connection of the first distributed monitor controller.

20 20. The apparatus of claim 15 further comprising:

means for discovering a status associated with each resource in the set of resources via the second distributed monitor controller; and

25 means for rewriting topology information associated with each resource in the set of resources in accordance with the discovered status associated with each resource in the set of resources.

21. The apparatus of claim 15 further comprising:

30 means for resynchronizing a resource status database with the topology information using the second distributed monitor controller.

100-500-500-500

22. The apparatus of claim 21 further comprising:

means for determining a portion of the resource status database that is necessary for resynchronizing the topology information; and

5 means for retrieving only the determined portion of the
resource status database.

23. An apparatus for management of a distributed data processing system using a network management framework comprised of network management framework components, the apparatus comprising:

5 means for receiving a resource request from a first
network management framework component;

means for determining whether the first network management framework component is a duplicate of a second network management framework component in response to receiving the resource request from the first network management framework component; and

means for granting access for a resource identified by the resource request to the first network management framework component in response to a determination that the first network management framework component is not a duplicate of a second network management framework component.

24. The apparatus of claim 23 further comprising:

20 means for detecting a potential failure of the second
network management framework component; and

means for activating the first network management framework component in response to detecting the potential failure of the second network management framework component, wherein the first network management framework component is similarly configured to the second network management framework component.

25. The apparatus of claim 23 further comprising:

means for denying access for a resource identified by the resource request to the first network management framework component in response to a determination that the first network management framework component is a duplicate of a second network management framework component.

26. The apparatus of claim 23 further comprising:

means for determining whether the second network management framework component is active in response to a determination that the first network management framework component is a duplicate of a second network management framework component; and

means for terminating the first network management framework component in response to a determination that that the second network management framework component is active.

27. A computer program product on a computer readable medium for use in managing a distributed data processing system, the computer program product comprising:

instructions for monitoring resources within the distributed data processing system using a set of distributed monitor controllers, wherein a first distributed monitor controller is responsible for monitoring a set of resources;

instructions for generating topology information associated with the set of resources in response to monitoring the set of resources;

instructions for detecting a failure of the first distributed monitor controller; and

instructions for updating the topology information associated with the set of resources in response to detecting the failure of the first distributed monitor controller.

28. The computer program product of claim 27 further comprising:

instructions for detecting a communication failure with the first distributed monitor controller; and

instructions for starting a second distributed monitor controller, wherein the first distributed monitor controller and the second distributed monitor controller are similarly configured.

29. The computer program product of claim 28 further comprising:

instructions for requesting the shutdown of the second distributed monitor controller in response to a determination that the first distributed monitor controller is active.

30. The computer program product of claim 29 further comprising:

5 instructions for receiving a request from the second distributed monitor controller to establish an input/output connection; and

instructions for determining that the first distributed monitor controller has an active input/output connection.

10 31. The computer program product of claim 28 further comprising:

15 instructions for establishing an input/output connection for the second distributed monitor controller in response to a determination that that the first distributed monitor controller is inactive.

32. The computer program product of claim 31 further comprising:

20 instructions for receiving a request from the second distributed monitor controller to establish an input/output connection;

instructions for determining that the first distributed monitor controller does not respond to communication on its input/output connection; and

25 instructions for terminating the input/output connection of the first distributed monitor controller.

33. The computer program product of claim 28 further comprising:

30 instructions for discovering a status associated with each resource in the set of resources via the second distributed monitor controller; and

TOP SECRET 6056560

instructions for rewriting topology information associated with each resource in the set of resources in accordance with the discovered status associated with each resource in the set of resources.

5

34. The computer program product of claim 28 further comprising:

instructions for resynchronizing a resource status database with the topology information using the second distributed monitor controller.

10

35. The computer program product of claim 34 further comprising:

instructions for determining a portion of the resource status database that is necessary for resynchronizing the topology information; and

instructions for retrieving only the determined portion of the resource status database.

15

TOP SECRET 53055860

36. A computer program product on a computer readable medium for use managing a distributed data processing system using a network management framework comprised of network management framework components, the computer program

5 product comprising:

instructions for receiving a resource request from a first network management framework component;

instructions for determining whether the first network management framework component is a duplicate of a second network management framework component in response to receiving the resource request from the first network management framework component; and

instructions for granting access for a resource identified by the resource request to the first network management framework component in response to a determination that the first network management framework component is not a duplicate of a second network management framework component.

37. The computer program product of claim 36 further comprising:

instructions for detecting a potential failure of the second network management framework component; and

instructions for activating the first network management framework component in response to detecting the potential failure of the second network management framework component, wherein the first network management framework component is similarly configured to the second network management framework component.

30

38. The computer program product of claim 36 further comprising:

instructions for denying access for a resource identified by the resource request to the first network management framework component in response to a determination that the first network management framework component is a duplicate of a second network management framework component.

39. The computer program product of claim 36 further comprising:

instructions for determining whether the second network management framework component is active in response to a determination that the first network management framework component is a duplicate of a second network management framework component; and

instructions for terminating the first network management framework component in response to a determination that that the second network management framework component is active.